

Richmond

FIREPROOF DOOR COMPANY

HOLLOW METAL DOORS

KALAMEIN DOORS

FRAMES AND TRIM

ELEVATOR DOORS

DUMBWAITER DOORS

INDUSTRIAL DOORS

COUNTERBALANCED DOORS

FIRE DOORS

SWING-FOLD DOORS

ELECTRIC OPERATORS

TRADE **Fyrgard** MARK



RICHMOND, INDIANA • BROOKLYN, NEW YORK

Fyrgard ANNOUNCES

A New Factory and A New Line

The name Richmond and the trade mark "Fyrgard" are synonymous meaning highest quality and service extending back over a long period of years in the field of metal covered doors and frames also freight elevator and large industrial doors. Architects and engineers have learned they can rely on Richmond to execute their requirements in an efficient and satisfactory manner.

Richmond has now added to its old line of door products a complete line of hollow metal doors. The company has expanded its facilities in acquiring the completely equipped plant of the Reliance Bronze and Steel Company at Brooklyn, N. Y. This move places Richmond in the enviable position where complete door requirements for a building regardless of size or type can be supplied from one source.

Richmond hollow metal will of course embody the complete service usually associated with that line and includes passenger elevator fronts, swing doors, frames and applied trim. The most up-to-date thermostatically controlled ovens and enameling equipment together with expert workmanship insures a high class finish on all these products.

A COMPLETE LINE WITH BETTER SERVICE

Architects can now expect to see the complete door and frame requirements for their building furnished by one factory or sub-contractor. The advantages of this are apparent and well known to every architect and builder. Look through these pages and specify all your door and frame requirements to be furnished by one factory. Richmond has men of many years experience in all lines even including the new hollow metal line who will follow through to see materials are of the highest grade and to suit the requirements.



BROOKLYN • NEW YORK



RICHMOND • INDIANA

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THE RICHMOND FIREPROOF DOOR COMPANY

EASTERN FACTORY: BROOKLYN, N. Y. • WESTERN FACTORY: RICHMOND, IND.

Richmond FLUSH HOLLOW METAL DOORS

Labeled and Non-Labeled

FOR HOSPITALS, SCHOOLS, LABORATORIES, OFFICES, HOTELS, ETC.

A flush or slab type hollow steel door with high grade baked enamel finish to match other interior work cannot be excelled for beauty or service and is certainly the best type from a sanitary standpoint.

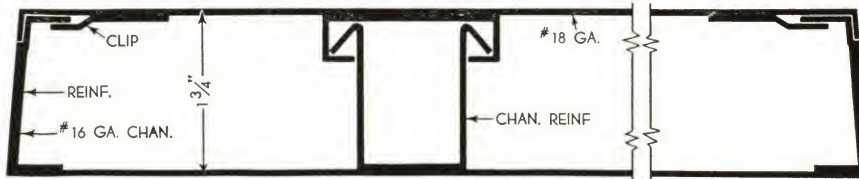
SPECIFICATIONS

Flush Type Hollow Steel Doors—Fabricated from two sheets of 16 gauge straightened and leveled furniture steel, to which are welded on the inside surfaces vertical stiffener sections about $4\frac{1}{2}$ in. apart. The stiffener sections on opposite plates interlock. Horizontal stiffener channels full width of doors to be welded to plates at top and bottom of door. Flush type doors can be made $1\frac{1}{4}$ or $1\frac{3}{4}$ in. thick. Slide type elevator doors are made $1\frac{1}{4}$ in. thick. Swing type elevator doors are made $1\frac{3}{4}$ in. thick. Fillers of Insulite full width of doors in strips to be provided for sound deadening.



Corner of Flush Hollow Metal Door

"FYRGARD" CONSTRUCTION FOR DEPENDABILITY AND STABILITY



Richmond PANELED HOLLOW METAL DOORS

Labeled and Non-Labeled

FOR APARTMENTS, HOTELS, OFFICE BUILDINGS, SCHOOLS, ETC.

Hollow steel doors of any type desired should be used throughout all public buildings. With the improved methods and material both for basic construction as well as finishes now available the architect should insist on steel for all doors and frames. Specify a seven coat baked enamel finish now recognized as the peak of perfection by the better grade of hollow steel door manufacturers. You can expect to get a graining job that will match the most beautiful grain in natural woods and should insist upon it.

Hollow steel doors by Richmond may be specified to meet any Underwriters' classification required by the location of the door in the building.

SPECIFICATIONS

Stiles and Rails of Paneled Doors—Made from 18-gauge cold rolled sheet steel having 20-gauge interlocking panel moulding of same material. Joints between stiles and rails to be welded. Top and bottom rail to be reinforced with two channel sections running full width of door and welded to rail plates, also to stiles.

Solid Panels—Built up from two outside thicknesses of furniture steel cemented onto a $\frac{1}{4}$ -in. thick core of fire retardant material. Steel of 18-gauge thickness is used for panels over 36 in. wide and 20-gauge for those under.



Corner of Paneled Hollow Metal Door



19 Rector Street, New York

A Few Typical Installations

Bradley Memorial Hospital
Southington, Conn.
Medical Building No. 2
Veteran's Administration
Newtown, Conn.
Dormitory Building
Bryn Mawr College
Bryn Mawr, Pa.
Dormitory Building
Pennsylvania State College
State College, Pa.
U. S. Post Office
New Rochelle, N. Y.
Grimke High School
Washington, D. C.
Y. M. C. Association Building
Worcester, Mass.
Alco-Gravure
Publication Corporation Building
Hoboken, N. J.
Baptist Memorial Hospital
Memphis, Tenn.

HOLLOW METAL DOORS FOR SMOKE SCREENS

Smoke screens or fire retarding partitions should be a complete unit to fill the required space shown on plans. These partitions to be of all steel welded construction with the frames made to receive applied trim held in place with concealed trim (alternate) to have integral trim to match other combination steel frames and trim throughout the building.

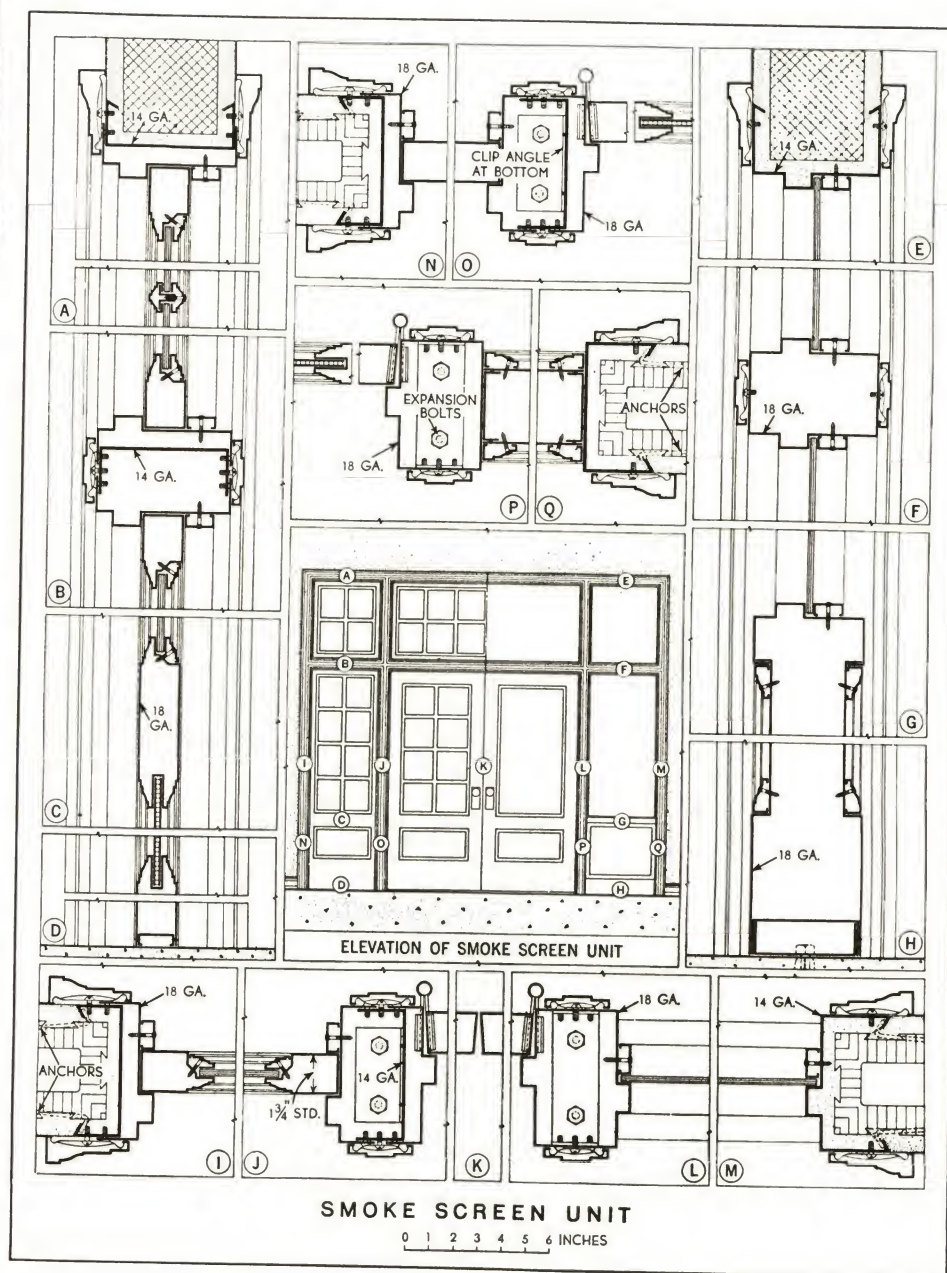
Where greater safety against burglarizing is desired than that afforded by the built-up panel described above, panels are made of $\frac{3}{16}$ or $\frac{1}{4}$ -in. thick steel plate.

Glazed Panels—Have glass mouldings of cold drawn steel secured to stationary mouldings by countersunk oval headed screws. All glass mouldings are made into frames with welded joints. When doors are of flush type, mouldings are welded to plates. Muntins where required are of cold drawn interlocking shapes welded to stiles and rails. Mirror doors have panel in back of mirror of 18-gauge steel.

LABEL SERVICE

Underwriters' Labeled Doors of hollow metal construction should be specified in all buildings where good appearances are a deciding factor.

Class A Fire Walls can now be supplied with all metal doors carrying an Underwriters' Class A Label in either flush or paneled construction. Simply specify the classification of label required according to the location in the building and designate whether paneled or flush doors are wanted.



Richmond KALAMEIN DOORS

Labeled and Non-Labeled

FOR APARTMENTS, HOTELS, OFFICES, SCHOOLS, INSTITUTIONS

Doors, frames, and trim furnished to any dimension, and any design illustrated. All types are standard in construction and thickness. Designs other than shown supplied upon request.

Kalamein swing doors may be furnished with or without Underwriters' label in accordance with construction.

Hollow metal mouldings, built into grooves in the stiles and rails or held by concealed clips, and machine pre-formed 24-gauge stretcher leveled metal covering are features of "Fyrgard" Doors.

Kalamein frames covered with tight fitting machine applied 24-gauge metal are smooth, with sharp, true lines. Kalamein frames cannot bear Underwriters' labels. If labeled frames are required, refer to our labeled all-metal frames.

Cores of all Richmond Kalamein doors, frames, casings, and moulds are machined from solid stock up to standard lengths.

Metal covered plinths of any design furnished upon request.

Standard finish—gray metallic primer. Durable baked enamel in plain color or wood grain applied in our factory when specified.

SPECIFICATIONS

LABELED AND NON-LABELED KALAMEIN DOORS

All metal covered doors shall be of the "Fyrgard" type as manufactured by The Richmond Fireproof Door Company.

Wood cores shall be of selected non-resinous spruce or white pine, kiln dried by door manufacturer. Stiles shall extend full height of door, and rails shall be tenoned into stiles. Wood cores shall be covered with 24 gauge zinc coated sheet metal (16 oz. copper where permitted and specified) drawn tight so as to lay smooth. All joints between rail and stile metal shall be lapped and nailed to wood cores. Seams to be soldered and ground smooth.

Panels shall be covered with 24 gauge zinc coated sheet metal glued to $\frac{1}{4}$ in. sheet asbestos (sheet rock for non-labeled doors) and held under high pressure until glue is set. Panels shall be set in hollow metal panel moulds, no nails, screws or clips to be used in moulds.

Glass shall be set in glass sash that is set in grooves of stiles and rails. Removable glass stops to be held in place with self-tapping sheet metal screws.

All doors shall be given one shop coat of gray metallic primer for galvanized iron.

Maximum door size all types except those with two solid panels is 3 ft. 6 in. wide by 7 ft. 6 in. high. Two panel doors limited to 3 ft. 10 in. wide by 7 ft. 6 in. high.

LABELED DOORS MANUFACTURED BY THIS METHOD COVERED BY U. S. LETTERS PATENT.

SPECIAL LABELED DOORS

Where sizes exceed those given and up to 4 ft. 0 in. by 8 ft. 0 in. or when exposed glass area must exceed 225 square inches, special labeled doors are furnished. The preceding specifications apply except as follows:

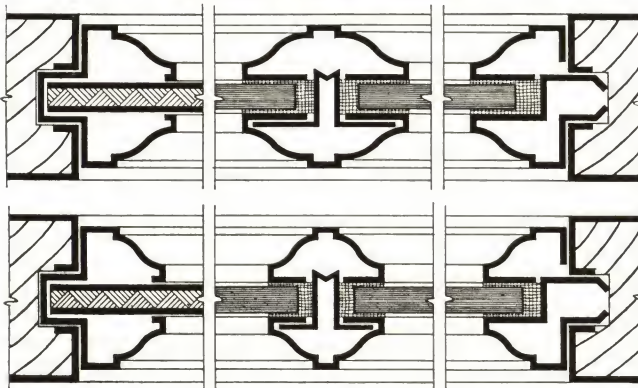
All joints between stile and rail metal shall be locked, soldered and ground smooth.

Panels shall extend into grooves in stiles and rails $\frac{1}{2}$ in. and be secured to core covering with $\frac{1}{8}$ in. bolts spaced not to exceed 10 in. on center.

Panel mould shall be hollow metal, mitered, brazed and attached to door with concealed clips.

Doors specified to have openings for glass, to have glass area surrounded by a $\frac{1}{4}$ x $\frac{3}{8}$ in. steel frame to which hollow metal glass mould and muntin bars are attached. Fixed muntin bar members shall be reinforced with $\frac{1}{8}$ x $1\frac{1}{2}$ in. bar steel for attachment of removable members.

STANDARD UNDERWRITERS' LABELED OR NON-LABELED KALAMEIN DOORS (Patented)



Kalamein Doors

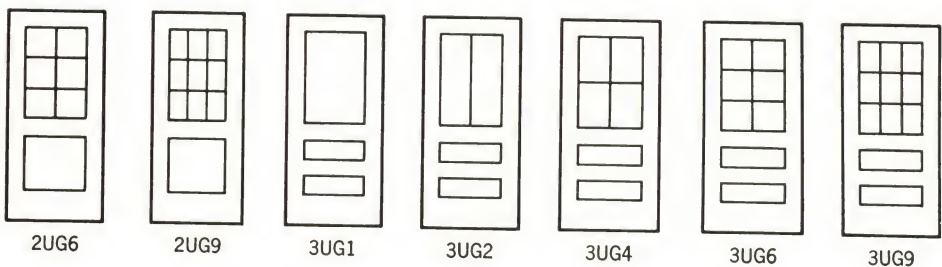
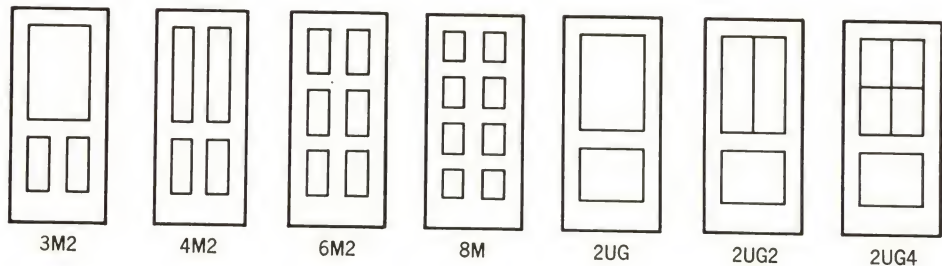
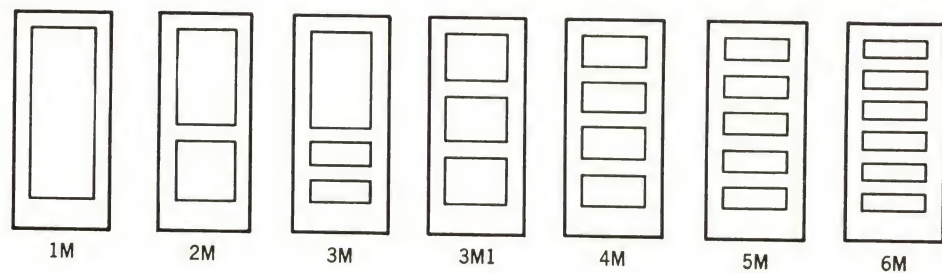
A Few Installations

Agfa Ansco, Binghamton, N. Y.
N. Y. Central Station, Syracuse, N. Y.
Sewage Disposal Plant, Niagara Falls, N. Y.
American-Viscose Co., Front Royal, Va.
American Tobacco Co., Durham, N. C.
American Can Co.
Supplee-Willis-Jones Co., Philadelphia, Pa.
Vassar College, Poughkeepsie, N. Y.
Johns-Manville, Richmond, Ind.
Traverse City Hospital, Traverse City, Mich.

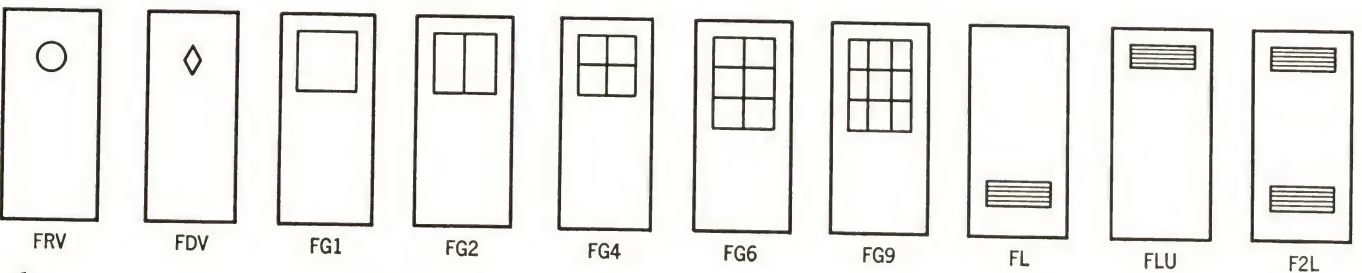
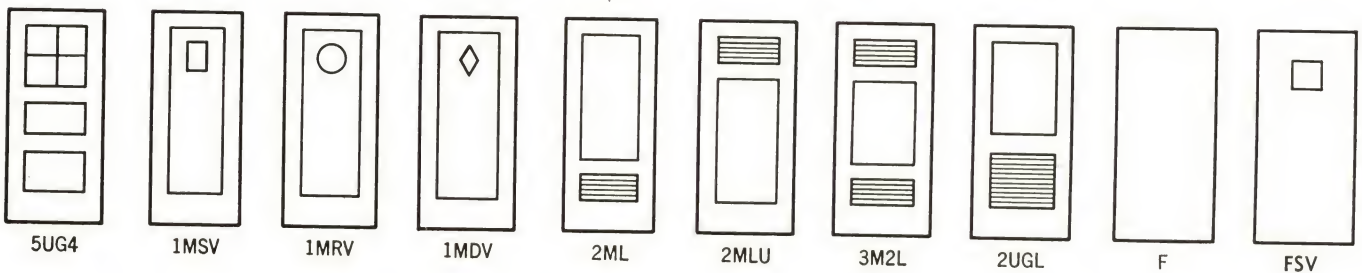
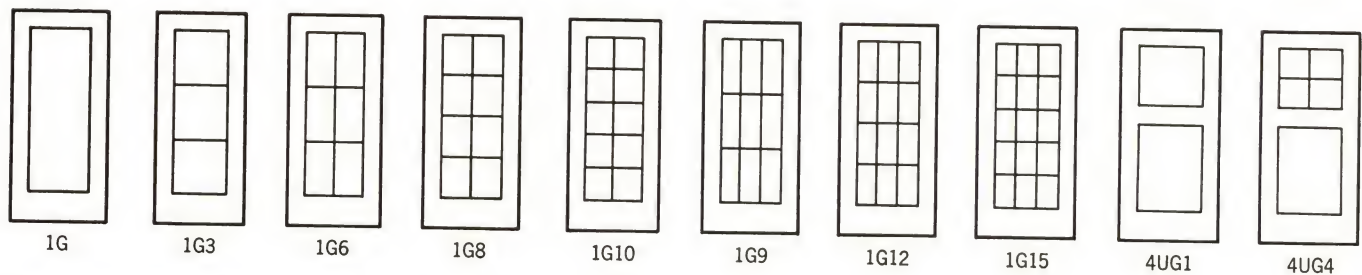


Barbizon-Plaza,
New York City

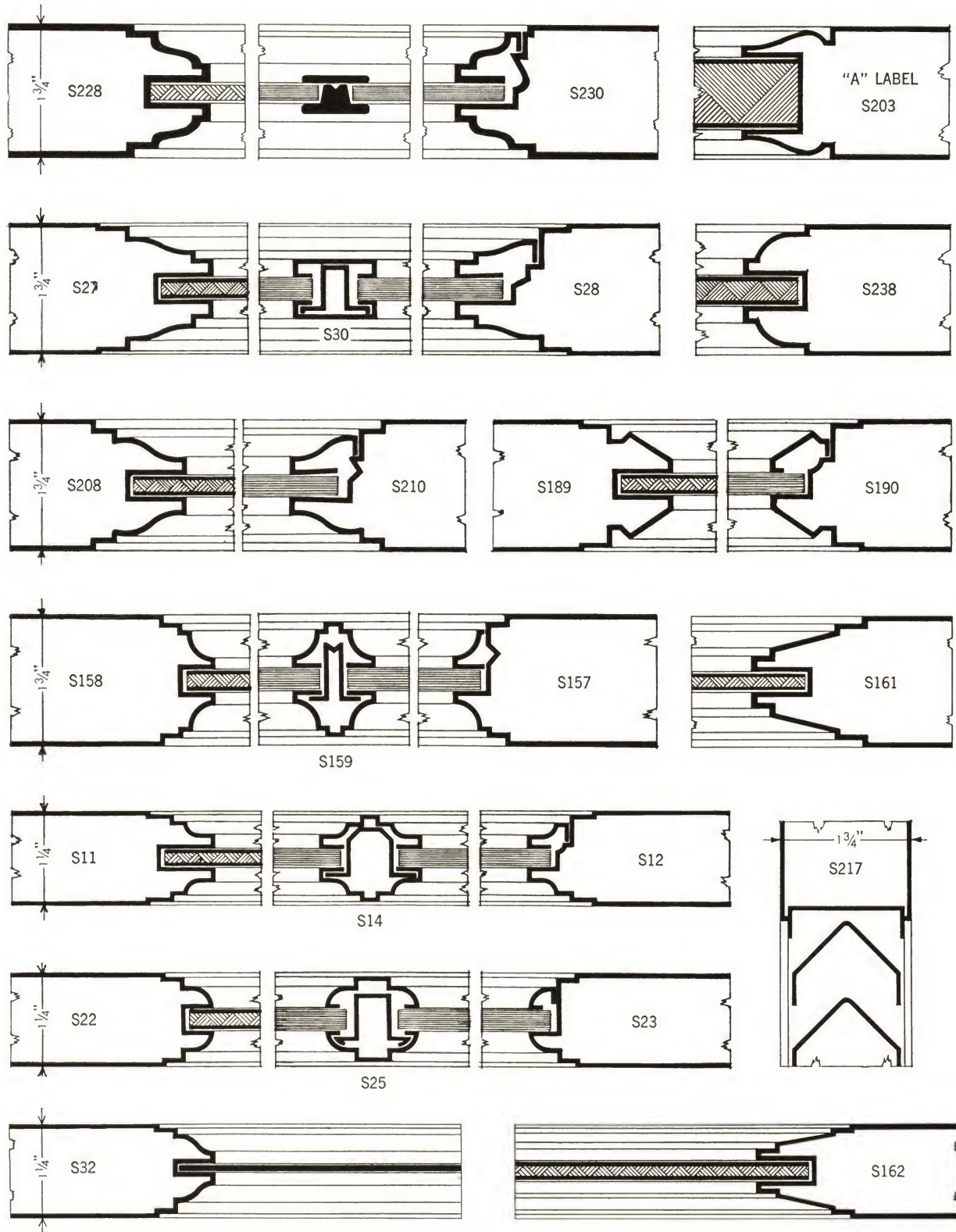
DESIGNS OF *Richmond* HOLLOW METAL *and* KALAMEIN DOORS



M - METAL VISION LIGHTS
G - GLASS SV - SQUARE
F - FLUSH RV - ROUND
L - LOUVRE DV - DIAMOND



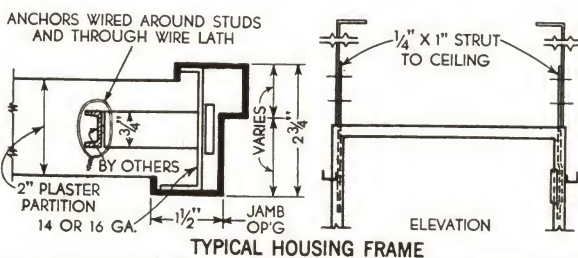
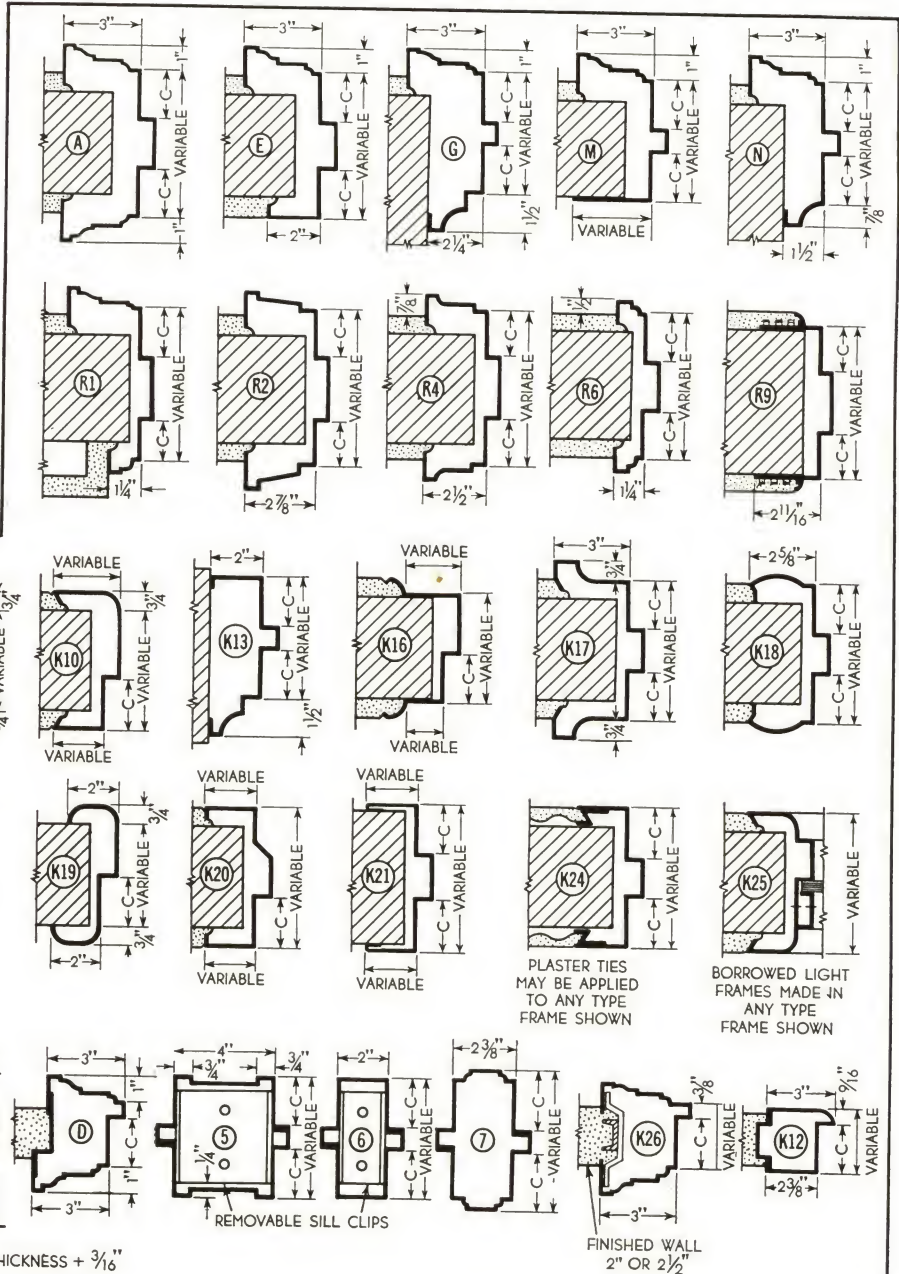
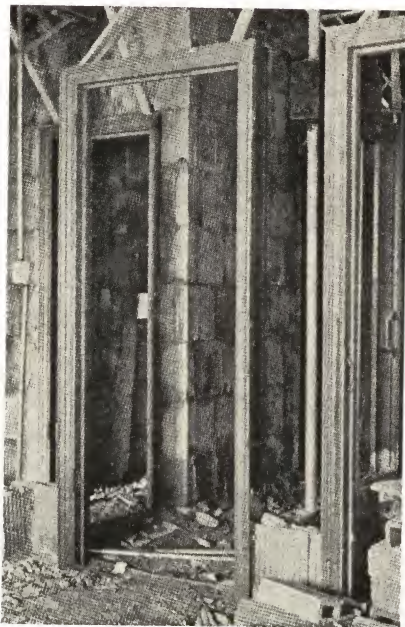
TYPES OF *Richmond* HOLLOW METAL DOOR MOULDINGS



Richmond FRAMES AND TRIM

Architects are unanimous now in specifying combination steel frames and trim for use in apartments, schools, hospitals, hotels, and, in fact, all public buildings. Certainly, where long life, fire protection and economy are factors, this construction has completely replaced wood frames and trim.

TYPES AND SIZES



GENERAL NOTE

UNLESS OTHERWISE SPECIFIED WE WILL FURNISH ALL BUCKS WITH CLIP ANGLES AT BOTTOM FOR FASTENING TO FLOOR, $\frac{3}{4}$ " X $\frac{3}{4}$ " ANGLE SPREADERS AND SIX (6) No. 5 GA. WIRE ANCHORS 9" LONG.

ALL DRILLING AND TAPPING FOR MORTISE HARDWARE WILL BE DONE AT FACTORY.

ALL DRILLING AND TAPPING FOR DOOR CHECKS, CHECK BRACKETS, TRANOM ADJUSTERS AND FLUSH BOLTS FOR PAIR OF DOORS TO BE DONE BY ERECTION CONTRACTOR.





Built in the same manner as specified on preceding pages 3, 4, 5, 6, 8 and 9 for Hollow Doors the same quality may be obtained as well as the same design and finish as the doors for the balance of the building.

The popular apartment house elevator door. This is the practical unit to specify on the automatic passenger elevator for apartments or small office buildings where tenants are required to operate the elevator.

Specifications—Doors to passenger elevator to be Swing Type, extra heavy construction, rigidly reinforced for hardware and interlocks. Doors to be 1½ in. thick. Panel Type Doors to be constructed throughout 18 gauge stretcher leveled cold rolled steel. Flush Doors to be constructed of 16 gauge stretcher leveled cold rolled steel.

Frames for Passenger Elevator Doors to span full thickness of walls and to be of the buck and trim type as indicated on plans. Frames to be constructed of not less than 14 gauge stretcher level pickled steel.

Doors under this heading to be furnished complete and erected in place by door contractor and to include "Rixson" floor hinges and "Ferralun" sill. Push plate and knob set.

Finish—Doors and frames finished at the factory with a baked-on enamel rubbed to an eggshell finish.

Elevators required to carry extremely heavy traffic, such as for hotels, hospitals, office buildings, and, in fact, any elevator busy enough to warrant the expense of an elevator operator, should have Slide Type Doors specified. Center Parting Slide Type Doors, where each have slides in opposite directions, provides the maximum in speed to completely open or close.

Next in line comes the Single Slide, two and three speed slide.

The diagram on the opposite page illustrates Slide Type Passenger Elevator Door, two-speed, both sections sliding to one side.

Specifications—Doors to be 1¼ in. thick (flush or paneled as indicated.)

Doors to be constructed throughout of not less than 18 gauge stretcher leveled steel sheets adequately reinforced where required and assembled by electric arc weld process.

Doors to have insulite filler to provide sound deadening.

Finish—Doors and frames finished at the factory with a baked-on enamel rubbed to an eggshell finish.

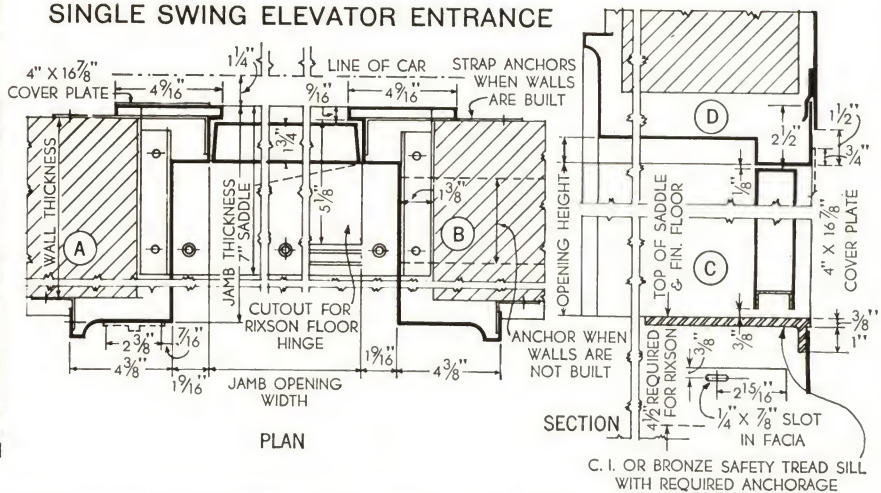
HANGER HOUSINGS—Formed of 9 gauge steel plates bent to form required and bolted to frame and angle supports.

ANGLE SUPPORTS FOR HANGERS AND CLOSERS—Built of structural angles extending from floor to floor and attached to the structural steel. Angles act as supports for operators or closers where used.

HOUSING COVERS—Made of 16 gauge metal and hinged or otherwise attached to hanger housings in such manner as to make inspection and oiling of hangers an easy matter.

ELEVATOR ENCLOSURE FRAMES—Either of the rough or finished type, are supported on the sills and attached thereto by clip angles.

ELEVATOR ENCLOSURE SILLS—Iron or bronze castings arranged with a non-slip type of surface and constructed to set upon and be bolted directly to the structural steel. Grooves for door guides are machined. Bumpers will be attached to sills.



C. I. OR BRONZE SAFETY TREAD SILL
WITH REQUIRED ANCHORAGE

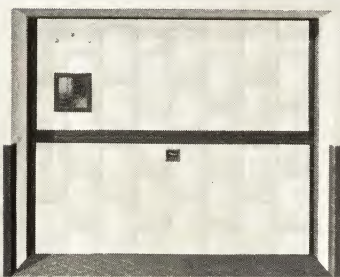
Richmond COUNTERBALANCED FREIGHT



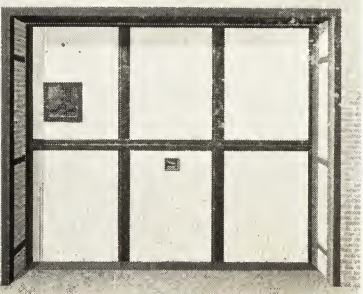
C-1 (without), CV-1 with Vision Light
Kalamein Paneled



C-2 (without), CV-2 with Vision Light
Flush Panel Kalamein



C-3 (without), CV-3 with Vision Light
Panels Covered with Tin Plate



C-4 (without), CV-4 with Vision Light
Corrugated Steel Panels

Richmond "Fyrgard" Counterbalanced Freight Elevator Doors are fabricated to give the greatest amount of service, under very hard conditions over many years.

REGULAR DOORS

Regular Type Doors are required where there is sufficient space in the pit and between the floors. When the openings are substantially the same size the space required between openings equals one-half of the opening height plus 9 in. A clear return of 8 in. at each jamb is required. Minimum clearance car to building sill $4\frac{1}{4}$ in. Oversize doors $4\frac{1}{2}$ in.

REGULAR TYPE DOORS WITH EXTENDED SILLS

Regular Type Doors with Extended Sills are required at openings when the space between openings is sufficient for "Regular" doors but where "Pass Type" doors occur in the same vertical line or series. The construction is identical with "Regular" doors except for the trucking, which is similar to that of a "Pass Type" door. Clearances required are the same as for "Regular" doors, except minimum clearance car to building sill is $5\frac{1}{4}$ in. as for "Pass Type" doors.

PASS TYPE DOORS

Pass Type Doors are required where the space between openings is less than that specified for "Regular" doors (but not less than 12 in.), and where openings of different height are in the same series. The upper door section is set into the shaft to slide by the lower section of the door above. The trucking sill is extended accordingly, a swinging lintel flame guard is provided on the top edge of the upper section, and the guides have double guide angles. Otherwise the construction is similar to that of "Regular" doors. A clear return of 8 in. is required at the jambs, minimum clearance car to building sill $5\frac{1}{4}$ in. for standard and "Oversize."

DESIGN

Richmond Doors are furnished in the four styles shown. Other than the paneling, the construction of all styles is identical. All styles may be labeled.

Kalamein Paneled—CV-1—Door in grained enamel to match finish in corridor adds the finishing touch. Hatch side flush tin clad or metal clad. Standard finish—Gray Metallic Primer.

Metal Clad—CV-2—Combines fine appearance with serviceability and is the most popular style. Cap seams may be inverted to obtain a flush surface. Standard finish—Gray Metallic Primer.

Tin Clad—CV-3—Very serviceable for factory or warehouse where appearance is not important. Finish Gray Primer.

Corrugated Iron—CV-4—Recommended for damp places. May be cadmium plated after assembly. Standard finish—Gray Metallic Primer.

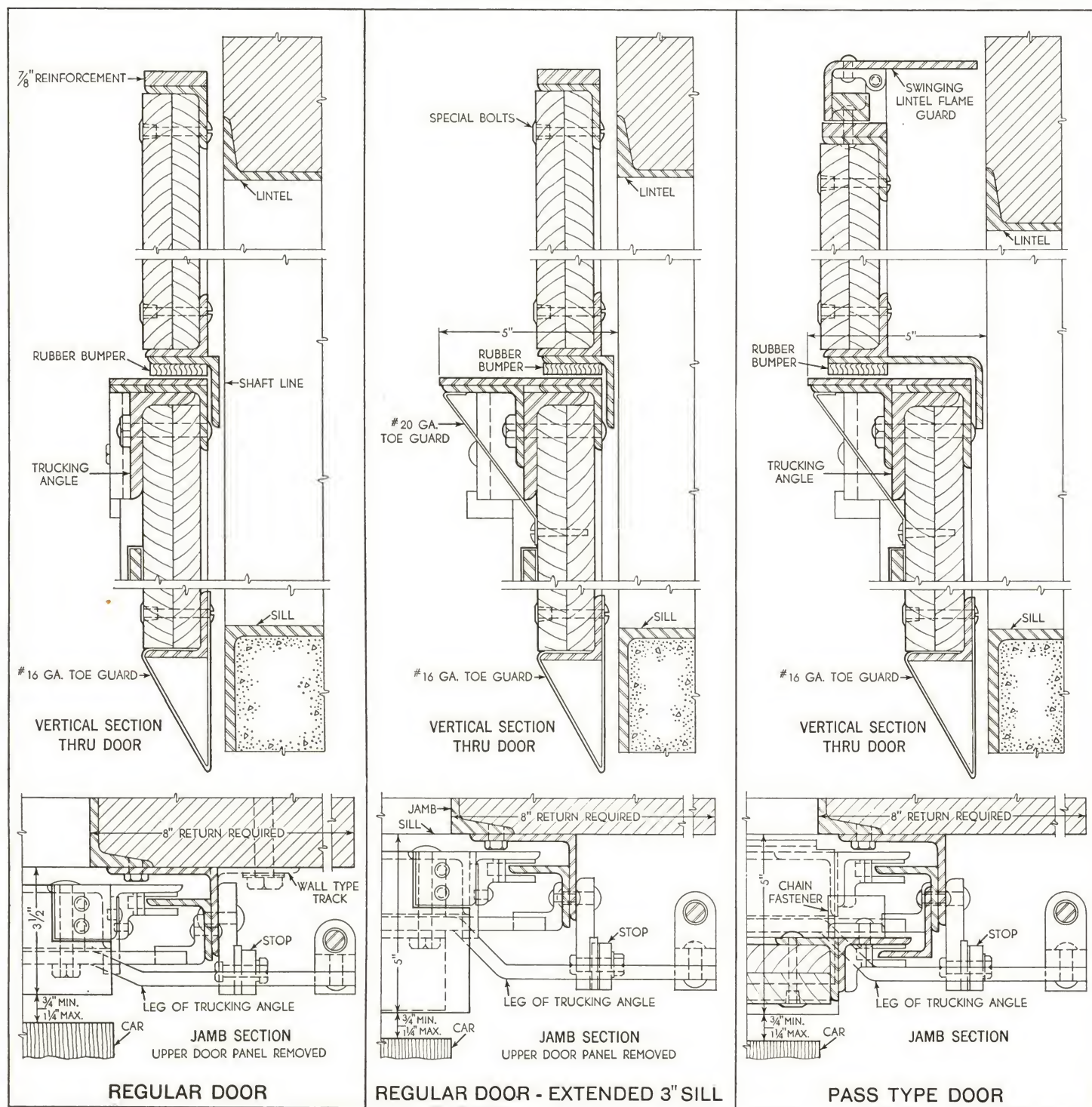
SPECIFICATIONS FOR FYRGARD LABELED COUNTERBALANCED

- For all openings to freight elevator shafts, except as otherwise noted, furnish and install "Fyrgard" Counterbalanced doors manufactured by The Richmond Fireproof Door Company, of Richmond, Indiana.
- Door paneling design to be Richmond Style—(CV-1), (CV-2), (CV-3), (CV-4).
 - CV-1 Door panels to be covered with 24 gauge galvanized patent leveled steel, laid smooth and free from waves and buckles, upon white pine kiln-dried core. Mouldings attached with concealed clips, corners mitred and welded.
 - CV-2 Door panels to be covered with 24 gauge galvanized patent leveled steel, laid smooth and free from waves and buckles, upon white pine kiln-dried core, with cap type vertical seams.
 - CV-3 Door panels to be covered with Standard approved Fire Door Terne plate.
 - CV-4 Door panels to be 18 gauge corrugated steel securely riveted to frame structure and reinforced with channel stays.
- Door trucking sills to sustain a maximum load of . . . pounds, to rest upon rigid adjustable stops riveted to door guides.
- Doors to be equipped with malleable antifriction milled groove guide shoes, to be hung upon $\frac{3}{8}$ -in. chain rods, and No. 6 cable chain running over 5-in. ball bearing machined malleable sheaves, and to operate in heavy structural angle guide rails, securely attached to shaft wall and opening frames.
- Doors to be provided with web strap closers for manual operation and equipped with (electro-mechanical interlocks) (Master interlocks) in accordance with car control. Interlocks shall be wired by (Door Contractor) (Elevator Contractor).
 - Doors to be equipped with DM Individual electric operators and interlocks arranged for (Push Button) (Automatic) control.
 - Doors to be equipped with (a) Penthouse Master Operator(s) and accessories complete arranged for (Push Button) (Automatic) control.
 - Doors to be arranged for prompt, easy manual operation in case of power failure.

ELEVATOR DOORS

Labeled and Non-Labeled

CONSTRUCTION OF STANDARD DOORS BUILT TO WITHSTAND ANY LOAD EQUAL TO ELEVATOR CAPACITY



(e) Power operated doors shall be completely wired by door contractor.

6. All material shall receive a prime coat of metallic primer at factory.

7. Door contractor to have free uninterrupted use of running elevator during installation of material.

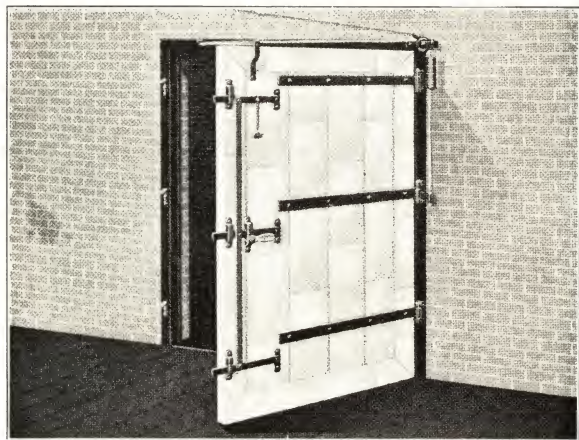
8. Unless otherwise noted, all opening frames, lintels

and sills to be furnished and installed by others.

9. Door contractor shall exchange drawings with elevator contractor, to the end that materials furnished under these contracts shall work for either to the best advantage.

10. All material to be guaranteed by The Richmond Fireproof Door Company against defective material and workmanship for a period of two years from date of installation.

Richmond AUTOMATIC FIRE DOORS



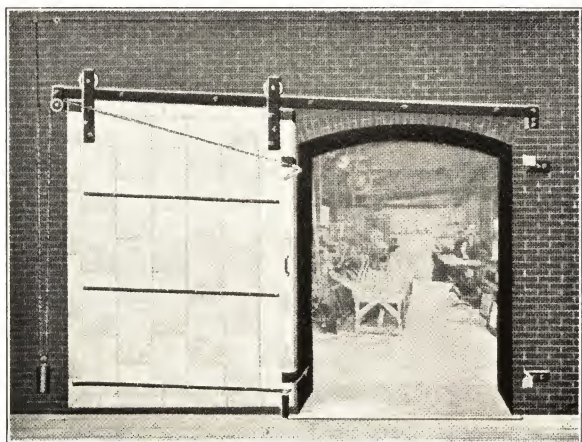
No. 125 Swinging Door and Hardware (Tin Clad)

Standard Headroom Required—Lap Type, 8 in.; Flush Type, 4 in.

Standard Return Required—Lap Type—6 in. at one jamb for Automatic Closing device.

Flush Type—Width of frame flange only. 6 3/4 in. required at one jamb for Automatic Closing device.

If conditions are not Standard, consult either Home Office or nearest Richmond Branch Office or Representative.



No. 200A Sliding Door and Hardware (Tin Clad)

Standard Headroom Requirements—Sliding Doors Nos. 205, 405: 14 in.

Nos. 200A and 400A Inclined Track, per following schedule:

Width of Opening	Req. Headroom	Width of Opening	Req. Headroom	Width of Opening	Req. Headroom
2'0"	17 3/4"	6'0"	23 3/4"	10'0"	29 3/4"
2'4"	18 1/4"	6'4"	24 1/4"	10'4"	30 1/4"
2'8"	18 3/4"	6'8"	24 3/4"	10'8"	30 3/4"
3'0"	19 1/4"	7'0"	25 1/4"	11'0"	31 1/4"
3'4"	19 3/4"	7'4"	25 3/4"	11'4"	31 3/4"
3'8"	20 1/4"	7'8"	26 1/4"	11'8"	32 1/4"
4'0"	20 3/4"	8'0"	26 3/4"	12'0"	32 3/4"
4'4"	21 1/4"	8'4"	27 1/4"	12'4"	33 1/4"
4'8"	21 3/4"	8'8"	27 3/4"	12'8"	33 3/4"
5'0"	22 1/4"	9'0"	28 1/4"	13'0"	34 1/4"
5'4"	22 3/4"	9'4"	28 3/4"	13'4"	34 3/4"
5'8"	23 1/4"	9'8"	29 1/4"	13'8"	35 1/4"

Standard Returns Required—Sliding Doors Nos. 200A, 400A, 205, 405. Return at opening jamb (past which door slides when opened). Opening width plus 20 in. Return at closing jamb, 14 in.

FYRGARD SWINGING DOORS

Doors are standard in channel frame or lap type, and are recommended where conditions will permit.

No. 125—(See cut)—Single swing door tin clad.

No. 325—Single swing corrugated steel door.

No. 135—Double swing door tin clad.

No. 335—Double swing corrugated steel door.

The double swing type is suitable for many situations where single door cannot be used.

FYRGARD SLIDING DOORS

No. 200A—(See cut)—Inclined track tin clad.

No. 400A—Inclined track corrugated steel.

Simple to install and operate. Universally and where ample headroom and returns are available.

No. 205—Level track tin clad.

No. 405—Level track corrugated steel.

Used where limited headroom will not permit use of inclined track.

No. 206—Level track, tin clad with closing and counterweights.

No. 406—Level track, corrugated steel with closing and counterweights.

Furnished where Nos. 205 and 405 are not approved.

SPECIFICATIONS (Swinging and Sliding Doors)

TIN CLAD DOORS

Core—Well seasoned white pine, fir, or spruce, tongue and grooved, dressed both sides to 3/8 in. two or three-ply as indicated by the plans, assembled with standard cut iron nails.

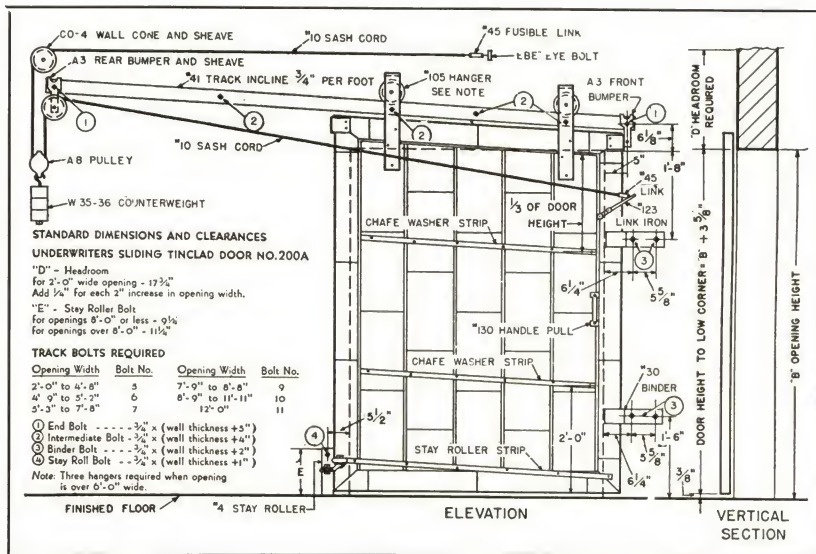
Covering—Standard I.C. 20 pound fire door terne plate laid flat to core. All seams locked. All in accordance with Underwriters' Standards.

CORRUGATED STEEL DOORS

Door Panel Frame—To be 2 1/2 x 2 x 1/8 in. angle mitre notched, bent, and welded.

Panel—To be layers of 24-gauge galvanized corrugated steel laid with corrugations of one layer at right angles with those of the other with a 1/8 in. thick layer of sheet asbestos between. Panels to be riveted to frame. Sliding doors to be provided with track binder angle.

Doors to be manufactured by The Richmond Fireproof Door Company of Richmond, Indiana, and bear the Underwriters' label.



Richmond SWING-FOLD DOORS and OPERATORS



Four Section Swing Fold

solid stock with loose glass mould to match.

Design—Panel and sash combination to be as shown on plans.

HARDWARE

Jamb Hinges—Jamb leaf to be attached to jamb with four bolts or cap screws. The door leaf to be provided with two 6 in. steel straps for heavy or two 3 in. steel straps for medium duty to extend across both faces of Jamb Door-Section and be through bolted thereto.

Center Hinges—Female leaf to be riveted to exterior strap of jamb hinge. The male leaf to be provided with a 3 in. steel strap to extend across exterior with a companion washer strip on interior of Suspended Door Leaf and through bolted thereto.

Trusses—Diagonal I-Beam Trusses and all required reinforcing to prevent distortion and warpage of door sections to be provided.

Astragal—All four section doors to be provided with Rubberized fabric and 5 in. strap steel astragals.

Note—For more complete specifications and data, write Home Office or consult local representative.

FOR WAREHOUSES, FACTORIES, INDUSTRIAL BUILDINGS, ETC.

HEAVY DUTY for openings up to 34 x 22 (Four Section)

MEDIUM DUTY for openings up to 20 x 17 (Four Section)

The entire load of door leaves and hardware is carried by the malleable iron and steel ball bearing, spring cushioned, grease gun lubricated, weather proofed, adjustable hinges. The largest doors may be easily manually operated when power operator is disconnected.

Specify all equipment, including steel opening frame, wood door, hardware and electric operator to be built by one manufacturer.

SPECIFICATIONS

Heavy Duty Doors and Hardware

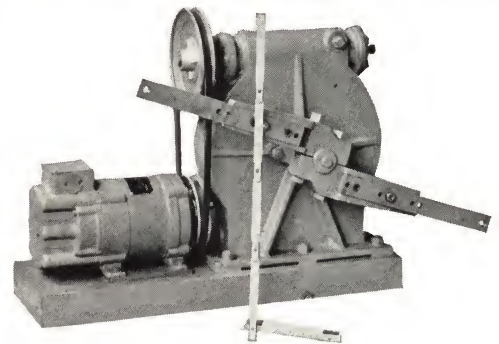
DOOR SECTIONS

Stiles and Rails—To be 2¾ in. thick, 2-ply White Pine or Sitka Spruce glued and blind screwed together. Joints between members to be double mortised and tenoned. Bottom edges of panel and sash openings to be lined with oak watersheds.

Panels—To be 1½ in. thick tongue and groove "V" grooved White Pine or Fir Ceiling.

Sash—To be White Pine, moulded into openings, muntin bars machined from

TYPE "DM" ELECTRIC EVERY PURPOSE OPERATOR



A successful, positive and automatic operator for installation on Swing-Fold Doors. By substituting suitable arms and linkage the operator may be used for Bifold or Swing Doors. The arms are secured to brackets on the jamb leaf in either case.

MOTOR SPECIFICATIONS

The Power Unit to be Richmond Type "DM" manufactured by The Richmond Fireproof Door Company. All parts to be made to standard dimensions, using template jigs, to permit replacement of parts and insure perfect fitting of all parts in machines of same size.

Motor—To be totally enclosed () Volt, () Phase, () Cycle A.C. Squirrel cage induction type, instantly reversible, high starting torque; to develop not less than () foot pounds when installed.

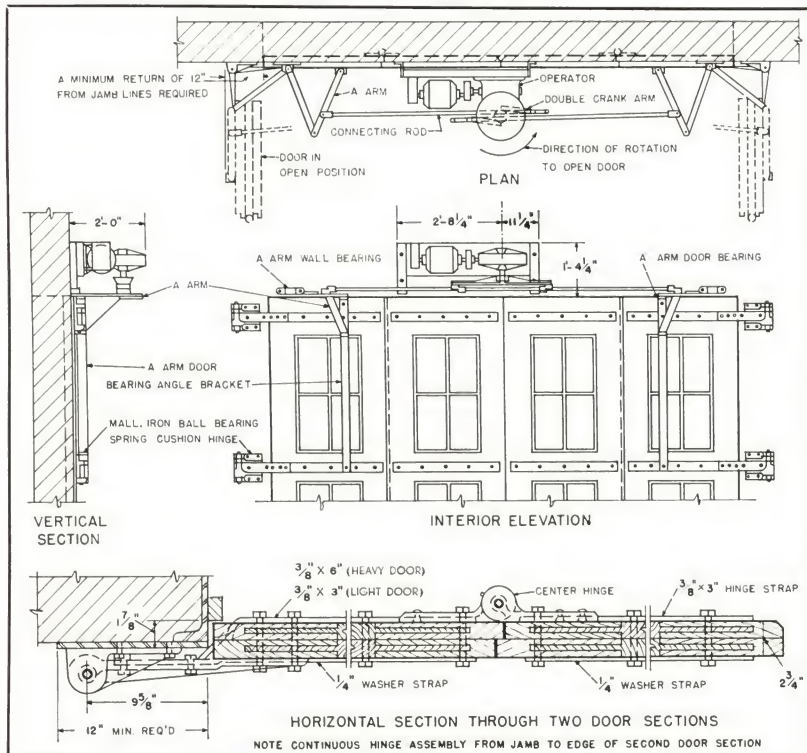
Note—Polyphase A.C. power supply preferred in all cases, but single phase A.C. or D.C. motors may be furnished, at increased cost.

Motor shaft to run in precision ball bearings.

Brake—To be two disc type. Rotating disc to be securely pinned to motor shaft, and carefully balanced. Brake disc to be faced with special friction material.

Brake to be applied by spring pressure and released by electro-magnets. (A.C. magnets to have laminated cores with damping rings to prevent humming noise.)

Entire brake and releasing magnets to be totally enclosed in motor and bell.



THE RICHMOND

FIREPROOF DOOR COMPANY

RICHMOND • INDIANA BROOKLYN • NEW YORK

Branch Offices • Agents • Representatives

AKRON, OHIO, Fred J. Crisp, Inc., 710 N. Main St.
 ALBUQUERQUE, NEW MEX., A. C. Weigerding, P. O. Box 173
 ALLENTOWN, PA., Geo. K. Halteman & Co., Allen & St. Cloud Sts.
 AMARILLO, TEXAS, Jenkins Mantel & Brick Co., 816 Harrison St.
 ASHEVILLE, N. C., J. A. Thompson, 57 Buchanan Place
 ATLANTA, GA., E. P. Hoffman, 212 Red Rock Bldg.
 BALTIMORE, MD., H. B. Brown Co., 406 W. Franklin
 BINGHAMTON, N. Y., Babcock, Hinds & Underwood,
 174 Washington St.
 BIRMINGHAM, ALA., D. P. Barrett Co., 320 Brown Mark Bldg.
 BLUEFIELD, W. VA., Bluefield Hardware Co.
 BOISE, IDAHO, J. G. Doerr, 501 S. 8th St.
 BOSTON, MASS., H. W. Pedersen, 57 Bartlett St., Everett
 BUCYRUS, OHIO, Patterson Iron & Wire Works
 BUFFALO, N. Y., Shults Engr. Co., Morgan Bldg.
 CAMBRIDGE, OHIO, Hanse H. Griswell, 306 N. 7th St.
 CANTON, OHIO, L. G. Peter, 715 Shorb Ave., N. W.
 CHARLESTON, S. C., Carolina Supply & Cement Co.
 CEDAR RAPIDS, IOWA, O. W. Latimer & Co., 701 Security Bldg.
 CHARLOTTE, N. C., R. R. Robertson, 212 Latta Arcade, P. O. Box 56
 CHATTANOOGA, Tenn., Currin-Andrews Co., 821 East 11th St.
 CHICAGO, ILL., The Richmond Fireproof Door Co., 130 N. Wells St.
 CINCINNATI, OHIO, Durbrow & Otte, 1424 Clay St.
 CLEVELAND, OHIO, The Richmond Fireproof Door Co.,
 405 Caxton Bldg.
 COLUMBIA, S. C., Columbia Steel Co., P. O. Box 741
 COLUMBUS, OHIO, Alvan Tallmadge, 63 Parkwood Ave.
 DALLAS, TEXAS, Maisey & Paige, 208 Construction Bldg.
 DAVENPORT, IOWA, Austin Crabbs, Inc., 715 East River St.
 DAYTON, OHIO, Dayton Fabricated Steel Co., 1300 E. Monument Ave.
 DECATUR, ILLINOIS, C. J. Gandy, 245 N. Westlawn Ave.
 DENVER, COLO., Colorado Bldrs. Supply Co., 1534 Blake St.
 DES MOINES, IOWA, Des Moines Stair Co., 610 Polk Bldg.
 DETROIT, MICH., The Richmond Fireproof Door Co.,
 2211 Woodward Ave.
 DULUTH, MINN., H. D. Bullard, 410 Builders Exchange
 ELMIRA, N. Y., Elmira Bldg. Units, Inc., 1898 Grand Central Ave.
 EL PASO, TEXAS, C. C. Gaines, 1002 Mills Bldg.
 ERIE, PA., Geo. H. Kraft & Son, 602 Schenley Drive
 FLINT, MICH., Flint Iron & Wire Works
 FT. WAYNE, IND., Jones & Moss, 225 Standard Bldg.
 FT. WORTH, TEXAS, Chas. F. Williams Co., Inc., 328 Lipscomb St.
 GRAND RAPIDS, MICH., Haven-Busch Co., 501 Front Ave., N. W.
 GREAT FALLS, MONT., Harold R. Hewitt, 3500 Fourth Ave., N.
 GREENSBORO, N. C., J. D. Wilkins, W. Lee St. at Glenwood Ave.
 GREENVILLE, S. C., Frank R. Henry Co., Masonic Temple
 HARRISBURG, PA., Atherton Bowen, 222 North St., P. O. Box 853
 HOUSTON, TEXAS, Maisey & Paige, 2911 Dalton St.
 HUNTINGTON, W. VA., James J. Weiler & Sons, 202 Elm St.
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 KANSAS CITY, MO., E. C. Marqua Co., 2728 Jarboe St.
 KNOXVILLE, TENN., R. G. Jefferies, 409 Clinch Ave.
 LOS ANGELES, CALIF., Kenneth C. Gaines, 1046 S. Olive St.

LOUISVILLE, KY., Equipment & Supply Co., 420 Baxter Ave.
 MANSFIELD, OHIO, Mansfield Structural Erecting Co.
 MEMPHIS, TENN., Mr. J. W. Peete, 1639 Vance Ave.
 MIAMI, FLA., The Aufford Kelley Co., 144 N. E. 21st St.
 MIDLAND, TEXAS, Chas. F. Williams Co., 311 W. Florida St.
 MILWAUKEE, WISC., Wm. M. Heinz, 720 N. Jefferson St.
 MOBILE, ALA., Underwood Coal & Supply Co.
 NASHVILLE, TENN., John Williams, Room 1207 Warner Bldg.
 NEW HAVEN, CONN., Hans Dumelin, 295 Sherman Ave.
 NEWARK, N. J., Yunker Metal Products Co., 17 Cypress St.
 NEW ORLEANS, LA., Nachary Bldrs. Supply Co., 318 Carondelet St.
 NEW YORK, N. Y., The Richmond Fireproof Door Co., 1 E. 42nd St.
 NORFOLK, VA., Globe Iron Construction Co.,
 Princess Anne Rd. & Park Ave.
 OKLAHOMA CITY, OKLA., Town-Sco Equip. Co., 211 N. W. 10th St.
 OMAHA, NEBR., Earl S. Lewis, 601 Redick Tower
 ORLANDO, FLA., A. N. Goodwin, P. O. Box 1104
 PADUCAH, KY., Paducah Iron Co., 216 So. 1st St.
 PEORIA, ILL., Samuel J. Smith & Co., 510 Lehmann Bldg.
 PHILADELPHIA, PA., N. R. Guilbert, Jr., 1722 Sansom St.
 PITTSBURGH, PA., James R. Pitcairn, 1822 Oliver Bldg.
 PORTLAND, ME., W. O. Hutchins, 193 Middle St.
 PORTLAND, ORE., E. E. Gilmer, 316 S. E. Madison St.
 PORTLAND, ORE., Columbia Wire and Iron Works,
 814 S. E. Market St.
 PORTSMOUTH, OHIO, Earl C. Hayes & Co., 1042 So. 20th St.
 POUGHKEEPSIE, N. Y., Hudson Valley Bldrs., Steel Co., 178 Cottage St.
 PROVIDENCE, R. I., Edward A. Gillerin, 30 Cherry Rd., Edgewood
 READING, PA., John H. Millard, 8 S. 20th St.
 RICHMOND, VA., J. S. Archer, 511 Atlantic Life Bldg.
 ROANOKE, VA., A. L. Horwitz, 208 Boxley Bldg.
 ROCHESTER, N. Y., E. W. Maurer, 703 Temple Bldg.
 ROCKFORD, ILL., Capitol Ornamental Iron Works, 1012 Ninth St.
 SALT LAKE CITY, UTAH, Manufacturers Spec. Co., 26 Exchange Bldg.
 SAN ANTONIO, TEXAS, John A. Williamson Co., 804 Avenue A
 SAN DIEGO, CALIF., Chas. H. Lentz, P. O. Box 727
 SAN FRANCISCO, CALIF., The Persons Co., 516 Call Bldg.
 SAN JUAN, PUERTO RICO, Earl K. Burton, Inc.
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 SEATTLE, WASH., Tourtellotte-Bradley, Inc., 401 White Bldg.
 SHREVEPORT, LA., The Meriwether Co., 1312 Jordan St.
 SIOUX CITY, IOWA, Otto F. Bridge, 513 Jackson St.
 ST. LOUIS, MO., Lasar Mfg. Co., 16th & O'Fallon Sts.
 ST. PAUL, MINN., Builders Engr. Co., 2694 University Ave.
 SYRACUSE, N. Y., B. R. Johnson, 145 Harding Place
 TAMPA, FLA., Stovall & Archer, 805 Peninsular Telephone Bldg.
 TOLEDO, OHIO, S. L. Everitt, 619 Edison Bldg.
 TUCSON, ARIZ., Construction Service Co., 423 N. Forth St.
 TULSA, OKLA., Murray R. Womble, 316 Atco Bldg.
 UTICA, N. Y., American Hard Wall Plaster Co., 728 Broad St.
 WASHINGTON, D. C., W. M. Schoenfelder,
 1222 Connecticut Ave., N. W.
 WICHITA, KANS., C. L. Anderson, P. O. Box 1143
 WILMINGTON, DEL., J. Francis Blaine, Inc., 25th St. near Broom
 WORCESTER, MASS., Haskins-Haire Wire Works, 9 May St.
 YOUNGSTOWN, OHIO, G. A. Doeright, Jr., 355 E. Wood St.